

React **props.children** Concept – Notes

What is **props.children** ?

props.children is a special prop in React that allows components to render content passed between their opening and closing tags.

Basic Example

App.jsx

```
import First from './components/First';

function App() {
  return (
    <First>
      <h1>This is children</h1>
      <p>This is a paragraph inside the child.</p>
    </First>
  );
}

export default App;
```

First.jsx

```
import React from 'react';
```




```
const First = (props) => {
  return (
    <div>{props.children}</div>
  );
};

export default First;
```

Why is it Useful?

- Allows **composition** of components.
- Makes components more **reusable** and **flexible**.
- You can pass:
 - JSX elements
 - Strings
 - Other components
 - Fragments

Common Use-Cases

| Use-Case | Description |
|--|--|
|  Layout Components | Wrap page content with common layouts (cards, modals, wrappers). |
|  Higher Order Components | Inject UI behavior or styling to children. |
|  Nesting Dynamic Elements | Allow components to accept any child JSX. |

Test it Yourself

```
<Wrapper>
  <h2>Hello Priyansh</h2>
```

```
<button>Click Me</button>
</Wrapper>
```

```
const Wrapper = ({ children }) => {
  return <section className="box">{children}</section>;
};
```

Common Mistake

```
<p1>This is wrong!</p1> // ❌
```

✅ Correct Usage:

```
<p>This is right!</p>
```

HTML only supports `<p>`, not `<p1>`, `<p2>`, etc.

Summary

| Key Point | Description |
|-----------------------------|--|
| <code>props.children</code> | Holds all the content inside a component's tag. |
| Benefit | Allows flexible component design and reusability. |
| Type | <code>props.children</code> can be a string, JSX, or an array. |
| Best Practice | Always validate HTML tags (<code><p></code> , not <code><p1></code>) |

✅ Pro Tip

You can also check if children exist before rendering:

```
{props.children && <div>{props.children}</div>}
```

Recommended Next Concepts

- React Composition
 - Higher Order Components (HOC)
 - Slot-based layout patterns
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Bhai agar tu ye notes Notion me import kar raha hai, to ye format perfectly paste ho jayega. Chahe to mai PDF version bhi bana ke de sakta hu ya aur examples bhi add kar du.

Batao bhai!